FLEXOVIT USA INC.

SAFETY DATA SHEET

SECTION 1 - Identification of the Product and Company

1.1 Product Name Reinforced Resinoid Bonded Abrasive Wheel

1.2 Product Use For material removal. See ANSI B7.1-2010

1.3 Company Details: Flexovit Abrasives Inc.

Address: 1305 Eden-Evans Center Rd.

Angola, NY 14006

Phone: 1-716-549-5100

Fax: 1-716-549-7932

SECTION 2 - Hazard Information

2.1 Precautionary statements

Wear Respirator, eye protection, and protective clothing when using product

Product will produce sparks and debris when in use, avoid using product near reactive

or flammable substances or electrical equipment

Discard if product comes in contact with water

2.2 Description of Hazards

Wheel dust is a respiratory irritant

Wheel dust and fiberglass reinforcement is a skin irritant

Fiberglass

Fiberglass in wheels have a diameter larger than 10 um and are considered non-respirable.

Phenol-formaldehyde Coating

Chronic health effect: Excessive exposure can cause skin sensitization and decreased lung capacity

Eye Contact: Can cause eye irritation

Skin Contact: Can cause skin irritation

Inhalation can cause irritation to mucous membranes and respiratory tracts.

Ingestion: Coating contains cryolite. Large doses of cryolite can cause severe nausea, vomiting,

diarrhea, abdominal burning and cramp-like pains.

| SECTION 3 - Composition | | | | | | | |
|------------------------------|-------------------------|----------------------------|---------------------|---------------------------|--|--|--|
| Ingredient Aluminum Oxide | <u>Formula</u> Al₂O₃ | <u>% Weight</u> 60 - 80 | OSHA Regulate No | <u>Cas #</u> 1344-28-1 | | | |
| Silicon Carbide | SiC | 0-70 | No | 409-21-2 | | | |
| Zirconium Oxide | ZrO ₂ | 0 - 12 | No | 1314-23-4 | | | |
| Calcium Hydroxide | Ca(OH) ₂ | 0-1 | No | N/A | | | |
| Barium Sulfate | BaSO ₄ | 0-10 | No | N/A | | | |
| Iron Sulfide | FeS ₂ | 0-18 | No | 1317-37-9 | | | |
| Alkali Aluminum Fluorides | | 0-15 | No | 16984-48-8 | | | |
| Cured Phenalic Resin | • | 0 - 15 | No | 9003-35-4 | | | |
| Glass Fiber | - | 0 - 5 | No | N/A | | | |
| Steel | - | 0.1 - 1 | No | N/A | | | |
| Carbon Black | - | trace | | | | | |
| Zinc | Zn | NA | No | N/A | | | |

SECTION 4-First Aid

4.1 First Aid for exposure

Dust Inhalation: Terminate exposure and remove to fresh air. Obtain medical assistance.

Ingestion: Obtain medical assistance.

Absorption: N/A

Skin contact: Terminate exposure and remove to fresh air. Obtain medical assistance.

Eye: Flush eyes with water

4.2 Signs and Symptoms of Exposure

Acute: May cause coughing and shortness of breath during grinding.

Skin irritation. Eye irritation.

Chronic: Decreased lung capacity

SECTION 5 - Fire Fighting Measures

5.1 Means Of Extinction: Water or carbon dioxide

5.2 Unusual Fire or Explosion Hazards: None

Flammable Properties: none

5.3 Special Fire Fighting Procedures: Consult NFPA or CFPA procedures

SECTION 6 - Accidental Release Measures

Normal clean up procedures should be used if material is released.

Use of gloves to clean up spent wheels is recommended

SECTION 7- Storage, Handling and Use Procedures

7.1 Handling: Avoid damage to wheel. Do not drop. Do not use a wheel that has been

damaged. Always handle in accordance with ANSI B7.1.

7.2 Storage: Avoid excessive temperatures in storage. Store in a dry area. Discard if wheel gets wet.

7.3 Use: Use in accordance with regulations and standards

SECTION 8- Personal Protective Control Measures

8.1 Exposure Limits

| Chemical | <u>OSHA PEL</u> | <u>ACGIH TLV</u> |
|-------------------|----------------------|-----------------------|
| Aluminum Oxide | NA | 10mg/m ³ |
| Silicon Carbide | NA | NA |
| Zirconium Oxide | NA | 10mg/m³ |
| Calcium Hydroxide | NA | 5mg/m ³ |
| Barium Sulfate | 0.5mg/m ³ | 10mg/m ³ |
| Iron Disulfide | NA | NA |
| Fluorides | 2.5mg/m ³ | 2.5mg/m ³ |
| Phenolic Resin | 5 P.P.M. | 5 P.P.M. |
| Fiber Glass | 15mg/m³ | 10mg/m³ |
| carbon black | 3.5 mg/m³ | 3.5 mg/m ³ |

8.2 Personal protection requirements and referrals

Respiratory: OSHA/NIOSH approved respirator. See OSHA 29 CFR 1910.134/European Standard EN 149

Ventilation: Engineering Controls recommended. See ANSI Z43.1. Refer to OSI IA 29 CFR 1910.94.

Protective Gloves: Leather gloves

Eye Protection: Protective eyewear such as safety glasses or face shield, Refer to OSHA 29 CFR 1910.133.

Hearing Protection: Hearing protection such as approved ear muffs or ear plugs. Refer to OSHA 29 CFR 1910.95.

Body Protection: Leather apron, chaps, or shoe coverings to shield from heavy spark showers in operation.

Hygienic Practices: Wash with soap and water after handling and grinding.

SECTION 9- Physical/Chemical Characteristics

Boiling Point N/A Specific Gravity 2 · 4

| Vapor Pressure | (mm Hg.) | N/A | Melting Point | N/A |
|---------------------|------------------|--------|------------------------------------|--------------------|
| Vapor Density | (AIR=1) | N/A | Evaporation Rate (Butyl Acetate=1) | N/A |
| Solubility in Water | | Slight | Appearance | Dark colored solid |
| Lower And Upper | Explosion Limits | N/A | Odor | plastic |
| Flammable Limits | | N/A | Degradation Temperature | ~ 800 F (427 C) |
| Flash Point | | N/A | | |

SECTION 10 - Stability and Reactivity Data

Avoid excessive moisture and humidity, temperature extremes and contact with acids or solvents

Not incompatible with any materials

No known hazardous reactions will occur

At temperatures exceeding 250° C hazardous or toxic decomposition products may be generated.

SECTION 11 - Toxicological Data

| 11.1 Component information | | |
|----------------------------|--------------------|-----------------------------------|
| Chemical | Long term effects | Short term effects |
| Aluminum Oxide | N/A | skin, respiratory irritation |
| Zirconium Oxide | N/A | skin, respiratory irritation |
| Glass fiber | N/A | skin, respiratory irritation |
| Alkali aluminum fluorides | fluorosis | skin, respiratory irritation |
| Cured Phenolic resin* | N/A | N/A |
| carbon black | N/A | skin, eye, respiratory irritation |
| Silicon Carbide | N/A | skin, eye, respiratory irritation |
| Calcium Hydroxide | Contact Dermatitis | skin , eye, |
| Barium Sulfate | Barilosis | skin, eye, respiratory irritation |
| iron Disulfide | N/A | skin, eye, respiratory irritation |

^{*} Cured phenolic resin contains trace amounts of formaldyhyde, a recognized carcinogen by US HTP

11.2 Route(s) of Entry and symptoms of exposure

See section 4.2

Section 12-Ecological Information

No Data Available

Section 13-Disposal Considerations

Dispose in accordance to local and federal regulations

Section 14-Transport Information

Not regulated as a hazardous material for transport

Section 15-Regulatory Information

No Data Available

Section 16-Other Information

SDS Revision Date:

September 1, 2017

Reason for Update:

Mandated Update

Preparation By:

FlexOvit USA

COMPANY USE

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